



2005 Minerals Yearbook

FRANCE

THE MINERAL INDUSTRY OF FRANCE

By Harold R. Newman

France was a major European mineral producer and the world's sixth ranked industrialized economy in terms of the gross domestic product (GDP). The country was in transition from a modern economy that had featured extensive Government ownership and intervention to one that relied more on market mechanisms. The country had partially or fully privatized many large companies; the Government, however, remained dominant in some sectors, particularly the power sector. The Government was working on a decentralization program that would transfer many central Government responsibilities to the regions, provinces, and cities. In accordance with European Union (EU) requirements, the Government continued to reduce the subsidies given to uneconomic mineral operations (U.S. Central Intelligence Agency, 2006§¹).

France had a population of 60.9 million in 2005 and has a land area of 545,630 square kilometers, not including its overseas administrative divisions. In 2005, the GDP based on purchasing power parity was \$1.8 trillion, which was the second largest in the EU, and the per capita income based on purchasing power parity was \$29,019. The inflation rate was 2.1%, and the unemployment rate was 9.9%. Reserves of foreign exchange and gold were estimated to be \$74.4 billion (International Monetary Fund, 2005§).

Government Policies and Programs

Progress in privatization has been made through the implementation of EU liberalization and deregulation directives. Regulatory reform by the Government has reduced the role of the state in the economy and has largely opened the country's markets to competition. Efforts were continuing to promote the private sector and to reduce the dependence of state-owned companies on subsidies.

The Government announced plans for an initial public offering (IPO) of shares in Electricite de France S.A. (EdF), which was the state-owned power company. The midyear IPO of 22% of Gaz de France S.A. (GdF) brought in €2.5 billion (\$3.1 billion²) for the Government and €2 billion (\$2.5 billion) for GdF to accelerate its foreign expansion program (The Business Online, 2005§).

Environmental Issues

The Ministère de l'Écologie et du Développement Durable was responsible for regulating key environmental issues which included agriculture runoff, air pollution from industrial and vehicle emissions, forest damage from acidic rain, mining,

mineral processing, and water pollution from urban wastes. The Government was committed to reducing toxic emissions and to enforcing regulations that concern transportation of hazardous materials (U.S. Central Intelligence Agency, 2006§).

Production

Metal and mineral industries generally maintained production and other activities at about the same rate and/or rate of decline as that of 2004 (table 1). The bauxite, coal, gold, iron ore, potash, and uranium mining sectors and the magnesium metal refining sector closed their operations owing to the depletion of commercial grade reserves, higher operating costs, or cheaper foreign sources.

Some bauxite waste dumps in the Languedoc region were reprocessed; the resulting product was used by cement companies to correct the iron content of cement. Changing conditions have required the closing of some mineral mining and refining operations.

Trade

In general, EU agreements and practices determine France's trade policies. Strong commercial relations continued between France and the United States; Germany remained France's leading export destination. On the basis of the quantity of exports and imports, France was the third ranked trading partner in Europe after the United Kingdom and Germany, and the ninth ranked trading partner of the United States worldwide. The total value of exports in 2005 was \$439.2 billion, and that of imports was \$471.4 billion, which resulted in a trade deficit of \$32.2 billion (The Economist, 2006§).

Structure of the Mineral Industry

Companies, such as Acelor Group, Alcan Inc., Ceca S.A., Lafarge S.A., explored for new domestic and international mineral resources, conducted research, and produced minerals and mineral products. Adjustment to the single European market resulted in mergers, closures of operations, and cooperative ventures as companies sought ways to obtain competitive advantages (table 2).

Commodity Review

Metals

Aluminum.—Alcan Inc. of Canada announced that it would start closing its 43,000-metric-ton-per-year (t/yr) smelter at Lannemezan, Hautes-Pyrenees Province, in mid-2006. The closure was expected to be completed by 2008. The plant had become a high-cost facility owing to its age, geographic location, size, and technology. The Lannemezan smelter

¹References that include a section mark (§) are found in the Internet References Cited section.

²Where necessary, values have been converted from EU euros (€) to U.S. dollars (\$) at the rate of €1.00=\$1.24.

produced about 1% of Alcan's primary metal output (Mining Journal, 2005a).

Gold.—Mines d'Or de Salsigne's underground Salsigne Mine near Carcassonne had been closed since 2002. It remained closed and was on care and maintenance status at yearend 2005.

Lead and Zinc.—A ruling by the French Court of Appeals in favor of Metaleurop S.A. ended almost 3 years of legal wrangling with receivers after the collapse of subsidiary Metaleurop Nord's Noyelles Godault lead and zinc plant in January 2003. The latest ruling meant that Metaleurop would operate according to a "continuation plan," which is similar to a U.S. Chapter 11 bankruptcy plan, that was filed with the Commercial Court in September 2005. The plan outlined a strategy for the company to pay off its remaining debt to creditors (Metal Bulletin, 2005).

The Umicore Group announced that it had decided to concentrate the strategic focus of its zinc division fully on the production and sale of zinc specialty products. This entailed discontinuing the sale of commodity zinc, which was mainly sold to the steel industry. Umicore planned to focus on development of products with higher added value and on the recycling of various zinc-bearing products. Umicore's zinc division was the world's leading zinc recycler (Umicore Group, 2005§).

Industrial Minerals

Cement.—Lafarge S.A. and Société des Ciment Français were the two leading producers of cement in France. Lafarge invested €25 million (\$31 million) in a new slag-grinding plant with a capacity of 300,000 t/yr. The plant would be located at the Port of Bordeaux in Bassens and was scheduled to be operational in early 2007 (Lafarge Group, 2005§).

Clay and Shale.—Imerys Group acquired Denain-Anzin Minéraux (DAM) from Nord Est in October 2005 for €55.7 million (\$69 million). Imerys was strengthening its European kaolin base and also adding other mineral sources. How Imerys would fit the DAM operations into its expanded series of business operations was not clear. Despite DAM's production of certain grades of kaolin used by the paper industry, the new operations would more likely fall into the specialty minerals business group, which covered the ceramics and fillers markets. The paper market represented only a small part of DAM's business; ceramics and glass were the main markets (Industrial Minerals, 2005a).

Gypsum.—France was one of Europe's major producers of gypsum. Two-thirds of the production was from the Paris Basin. S.A. de Matériel de Construction was the leading producer.

Salt.—Compagnie des Salins du Midi et des Salines de l'Est (Salins du Midi) was the French entity of the Salins Group. The Group was a leading European salt producer with production sites in France, Italy, and Spain. Salins du Midi had production sites in Aigues Mortes, Dax, Salin de Giraud, and Varangeville and produced about 2.5 million metric tons per year (Mt/yr) of salt (Salins Group, 2005§).

Talc and Pyrophyllite.—In 2005 Talc de Luzenac S.A. celebrated its first 100 years of operation. The company was the operator of the world's largest talc deposit at Luzenac, Ariège.

Talc de Luzenac mined talc from the Trimouns quarry in the Pyrenees and was the only open pit talc mine in operation in France in 2005. Talc de Luzenac produced about 400,000 t/yr of talc and had estimated reserves for 100 additional years of operation (Industrial Minerals, 2005b).

Mineral Fuels and Related Materials

France has few indigenous energy sources, which include only small amounts of coal, natural gas, and petroleum. The exploitation of these resources has steadily decreased during the past two decades, and nuclear power has dominated the energy supply sector. French energy policy has been relatively consistent with the main objectives of securing energy supply, achieving international competitiveness, and protecting the environment. The focus on energy security has led France to become one of the world's top producers and consumers of nuclear power.

Coal.—Charbonnages de France's last operating coal mine, La Houve Mine, which was located near Cretzwald, was closed by yearend 2004. This closure brought an end to coal mining in France (U.S. Energy Information Administration, 2006a§).

Natural Gas and Petroleum.—Because of France's limited natural gas resources (380 billion cubic meters), domestic production supplied only 5% of the natural gas that was consumed in the country. GdF, which was majority-owned by the Government, dominated natural gas activities. The EU has enacted directives that seek to liberalize European natural gas markets. France has been one of the slowest EU members to implement these directives into national law. In 2005, the Government sold shares in GdF to private investors to raise cash for the company; French law, however, required the Government to retain majority ownership of GdF (U.S. Energy Information Administration, 2006c§).

France had 159 million barrels of estimated proven reserves of petroleum at yearend 2005. Crude oil production was about 21,300 barrels per day in 2005. France was the 10th ranked consumer of petroleum in the world and consumed 1.91 million barrels per day (Mbbbl/d) in 2005. To meet this demand, crude oil imports totaled 1.89 Mbbbl/d in 2005. The major sources of these imports were Norway, Russia, Saudi Arabia, and the United Kingdom (U.S. Energy Information Administration, 2006c§).

Malta Oil Ltd. (MO) acquired from Eagle Energy Ltd. an 11.15% interest in an oil and gas exploration and exploitation license known as the St. Laurent Petroleum License in southwest France. MO's rights under the license would enable the company to receive revenues from the exploitation of oil and gas reserves in the license area. The St. Laurent Petroleum License covers an onshore area of about 650 square kilometers; it is located in the Aquitaine Basin, which was thought to contain some of Europe's largest onshore oilfields and gasfields (Petroleum Economist, 2006).

Nuclear Energy and Uranium.—Compagnie Générale des Matières Nucléaires, which was the state-owned uranium mining company, was the major producer of uranium. Its uranium mines remained closed in 2005.

France was the world's leading nuclear power generator on a per capita basis and ranked second in total installed nuclear

capacity after the United States. About 79% of electricity generated in France came from 58 nuclear powerplants (U.S. Energy Information Administration, 2006b§).

The major nuclear enterprises were controlled by the state-owned holding company Areva S.A. The Government cancelled plans to sell a significant shareholding in Areva on the basis of the strategic importance of nuclear fuel and because the special requirements for handling enrichment and waste products warranted the maintenance of Government control. The Government owned about 87% of Areva, and an additional 9% was held by state-related entities. Private investors held about 4% (Mining Journal, 2005b).

Outlook

In part because it is one of the world's most developed economies, France is an advocate of the EU and European single-market concept. Reforms undertaken in France during the past two decades have helped the country's economic performance, but further improvements in regulations would benefit its businesses and citizens. France is the third ranked trading nation in western Europe after the United Kingdom and Germany and is expected to remain so. The country has had to make considerable changes in the structure of its industries, particularly those mineral industries controlled by the state. Some state-owned companies, such as EDF, have taken the initiative to become leaders in their respective industries. Others have been forced to make additional adjustments under rationalization schemes proposed by either the EU or the Government. These adjustments are expected to continue to bring the country more in line with EU policy. The depletion of mineral resources and/or the cessation of subsidies for uneconomic operations have affected local communities and their economies, and adjustments by the Government to compensate for these effects will be required. France has the advantage of plentiful electrical power to attract industrial facilities that require skilled workforces and good access to markets in Europe. The low cost of nuclear energy means that there is little economic justification to develop alternative fuel sources. If nuclear power is phased out, then imports of oil and gas will be required to supplement power production from wind farms.

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Major Sources of Information

- Bureau de Recherches Géologiques et Minières (BRGM)
Avenue de Concyr, BP 6009
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Direction Général de l'Énergie et des Matières Premières (DGEMP)
61 Bld Vincent Auriol
75703 Paris, Cedex 13, France
Ministère de l'Économie, des Finances et de l'Industrie (MINEFI)
139, rue de Bercy
75572 Paris, Cedex 12, France

TABLE 1
FRANCE: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2001	2002	2003	2004 ^c	2005 ^c	
METALS						
Aluminum:						
Bauxite, gross weight ³	thousand metric tons	174	170	168	160 ^{r,4}	168 ⁴
Alumina:						
Crude	do.	600	600 ^e	500 ^e	500	500
Calcined	do.	480	500 ^e	450 ^e	450	450
Metal:						
Primary	do.	462	463	445	451 ^{r,4}	442 ⁴
Secondary	do.	253	262	240	236 ⁴	222 ⁴
Antimony, metal, including regulus ^c		500	500	500 ^e	500	500
Cadmium metal		176	63	--	--	--
Cobalt, metal:						
Powder ^e		600	500	500	500	500
Chloride		199	175	181	191 ⁴	191 ⁴
Copper, metal, secondary:^c						
Blister		500	--	--	--	--
Refined		1,500	500	--	--	--
Gold, mine output, Au content	kilograms	2,510	1,724	1,470	1,312 ⁴	--
Iron and steel:						
Metal:						
Pig iron	thousand metric tons	12,004	13,217 ^r	12,756	13,200 ⁴	12,700 ⁴
Ferrous alloys, electric furnace:^c						
Ferromanganese	do.	130	130	120 ^r	106	110
Ferrosilicon	do.	100	100	100	87	100
Silicomanganese	do.	50	50	107	64	65
Silicon metal	do.	75 ^r	75 ^r	75 ^r	75 ^r	75
Other	do.	65 ^r	65 ^r	65 ^r	65 ^r	65
Total	do.	420 ^r	420 ^r	467 ^r	397 ^r	415
Steel:						
Crude	do.	19,431	20,524	19,803	20,760 ⁴	19,500 ⁴
Hot-rolled	do.	16,593	18,561	18,400	19,128 ⁴	18,000 ⁴
Lead:						
Smelter, secondary		132,000 ^e	105,000	--	-- ⁴	-- ⁴
Refined:						
Primary		98,257	83,575	1,535	--	--
Secondary		143,338	111,643	96,155	105,600 ⁴	105,500 ⁴
Total		241,595	195,218	97,690	105,600 ⁴	105,500 ⁴
Magnesium metal, including secondary ^c		4,000 ⁵	--	--	--	--
Nickel metal ⁶		11,033	11,440	11,138	12,100	10,684 ⁴
Silver:^c						
Mine output, Ag content	kilograms	800	600	500	500	500
Metal, Ag content of final smelter products	do.	450	400	400	400	400
Tin, secondary		1,644	1,600	1,500	1,500	1,500
Tungsten, mine output, W content of powder ^c		500	500	500	500	500
Zinc metal, including slab and secondary		343,805	338,924	268,408	267,528 ⁴	210,000
INDUSTRIAL MINERALS						
Barite, BaSO ₃ equivalent		81,000	80,000 ^e	81,000	81,000	81,000
Bromine, elemental ^c		7,800	6,000	6,000	6,000	6,000
Cement, hydraulic	thousand metric tons	19,839	19,450 ^r	19,660 ^r	20,960 ⁴	21,000
Clays:						
Kaolin and kaolinitic clay (marketable)	do.	375	339	323	316 ⁴	316
Refractory clay, unspecified	do.	14	15 ^e	15 ^e	15	15
Diamond, synthetic, industrial ^c	thousand carats	3,600	3,600	3,600	3,600	3,600
Diatomite ^c	thousand metric tons	85	80	80	75	75

See footnotes at end of table.

TABLE 1—Continued
FRANCE: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2001	2002	2003	2004 ^e	2005 ^e
INDUSTRIAL MINERALS--Continued					
Feldspar, crude thousand metric tons	650 ^c	659	671	628 ⁴	625
Fluorspar:					
Crude do.	250	250 ^e	250 ^c	260	250
Marketable:					
Acid- and ceramic-grade do.	90 ^r	90 ^r	79	80	80
Metallurgical grade do.	20	15 ^r	10	10	10
Total do.	110 ^r	105	89	90	90
Gypsum and anhydrite, crude ^c do.	4,500	4,500	3,500	3,500	3,500
Kyanite, andalusite, related materials ^c do.	65	65	65	65	65
Lime, quick and hydrated, dead-burned dolomite ^c do.	3,000	3,000	3,100	3,000	3,000
Mica ^c	10,000	10,000	10,000	10,000	10,000
Nitrogen, N content of ammonia thousand metric tons	1,373	1,172	1,153	1,120 ⁴	1,200
Pigments, mineral, natural, iron oxide ^c	1,000	1,000	1,000	1,000	1,000
Phosphates, Thomas slag thousand metric tons	50	50 ^e	50 ^c	50	50
Potash, K ₂ O equivalent (marketable) do.	257	139	-- ^c	--	--
Pozzolan and lapilli ^c do.	400	400	400	400	400
Salt:					
Rock salt do.	596	446	439	407 ⁴	425
Brine salt, refined do.	1,727	1,741	1,718	1,702 ⁴	1,700
Marine salt ^c do.	1,000	1,000	1,000	1,000	1,000
Salt in solution do.	3,774	3,620	3,516	3,800	3,600
Total do.	7,097	6,807	6,673	6,910	6,730
Sodium compounds: ^c					
Soda ash	1,000	1,000	1,000	1,000	1,000
Sodium sulfate	120	120	120	120	120
Stone, sand and gravel: ^c					
Limestone, agricultural and industrial	12,000	12,000	12,000	12,000	12,000
Slate, roof	30	30	30	30	30
Sand and gravel:					
Industrial sands	5,062	5,179	5,089	5,242 ⁴	5,200
Other sand, gravel, and aggregates	172,764	166,788	160,884	163,404 ⁴	165,000
Sulfur, byproduct:					
Of natural gas and petroleum	837 ^r	787 ^r	816 ^r	765	750
Of unspecified sources	260 ^r	229 ^r	196 ^r	200	200
Total	1,097 ^r	1,016 ^r	1,012 ^r	965	950
Talc:					
Crude	367,000	343,200	345,600	336,000 ⁴	340,000
Powder ^c	300,000	300,000	300,000	300,000	300,000
MINERAL FUELS AND RELATED MATERIALS					
Asphaltic material ^c	25,000	20,000	20,000	20,000	20,000
Carbon black ^c	250,000	200,000	200,000	200,000	200,000
Coal, including briquets:					
Anthracite and bituminous thousand metric tons	2,364	1,483	1,730	160 ⁴	--
Lignite do.	324	148	9	--	--
Total do.	2,688	1,631	1,739	160 ⁴	--
Briquets ^c do.	200	175	175	100	100
Coke, metallurgical do.	5,091	4,552	4,601	4,616 ⁴	4,500
Gas, natural, marketed million cubic meters	1,810 ^c	1,750	1,520	1,330 ⁴	1,400
Petroleum:					
Crude thousand 42-gallon barrels	10,082	9,825	9,150	8,550 ⁴	7,775 ⁴

See footnotes at end of table.

TABLE 1—Continued
FRANCE: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2001	2002	2003	2004 ^c	2005 ^c	
MINERAL FUELS AND RELATED MATERIALS—Continued						
Petroleum—Continued:						
Refinery products:						
Liquefied petroleum gas	thousand 42-gallon barrels	31,682 ^r	26,901 ^r	33,617 ^r	32,000 ^{r,4}	32,000
Gasoline, all kinds	do.	135,488 ^r	128,115 ^r	143,263 ^r	140,000 ^{r,4}	140,000
Kerosene and jet fuel	do.	47,815 ^r	41,428 ^r	41,356 ^r	42,000 ^{r,4}	42,000
Distillate fuel oil	do.	258,822 ^r	245,645 ^r	261,340 ^r	250,000 ^{r,4}	250,000
Residual fuel oil	do.	69,679 ^r	66,357 ^r	70,847 ^r	72,594 ^{r,4}	72,600
Other products ^e	do.	128,334 ^r	118,698 ^r	127,166 ^r	129,000 ^{r,4}	129,000
Refinery fuel	do.	37,084 ^r	34,128 ^r	34,419 ^r	35,000 ^{r,4}	35,000
Total	do.	708,904 ^r	661,272 ^r	712,008 ^r	700,594 ^{r,4}	701,000
Uranium:						
Mine output, U content		182	-- ^r	--	--	--
Chemical concentrate, U ₃ O ₈ equivalent		156	12	--	--	--

^cEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised. -- Zero.

¹Table includes data available through September 2006.

²In addition to the commodities listed, France produces germanium from domestic ores, but actual output is not regularly reported. France also produced large amounts of stone, but statistics on output are not available.

³Reprocessed bauxite not for metallurgical use.

⁴Reported figure.

⁵Plant closed in June 2001.

⁶Excludes secondary production from nickel/cadmium batteries.

TABLE 2
FRANCE: STRUCTURE OF THE MINERAL INDUSTRY IN 2005

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Alumina		Aluminium Pechiney (Alcan Inc., 97.95%)	Plant at Gardanne	700
Aluminum		do.	Aluminum smelters at:	
Do.		do.	Saint-Jean-de-Maurienne, Savoie Province	120
Do.		do.	Noguères, Pyrenees, Atlantiques Province	115
Do.		do.	Lannemezan, Hautes-Pyrenees Province	63
Do.		do.	Auzat, Ariège Province (closed)	50
Do.		Aluminium Dunkerque (Alcan Inc., 97.95%)	Dunkerque, Calais du Nord	250
Andalusite		Denain-Anzin Minéraux Réfractaire Céramique	Glomel Mine, Brittany	75
Antimony, metal		Produits Chimiques de Lucette	Plant at Le Genest, Mayeene Province	15
Barite		Barytine de Chaillac	Mine and plant at Chaillac, Indre Province	150
Do.		Société Industrielle du Centre	Mine at Rossigno, Indre Province	100
Cadmium	metric tons	Compagnie Royale Asturienne des Mines	Plant at D'Auby-les-Douai, Nord Province	200
Cement		Eight companies, the largest of which are:	80 plants, including:	23,233
Do.		LaFarge S.A.	15 plants; largest at St. Pierre-la-Cour (1,160)	7,815
Do.		Société des Ciment Français	13 plants; largest at Gargenville (1,100)	6,190
Clay, kaolin		La Source Compagnie Minière	Kaolin d'Arvor Mine, Quessoy	300
Coal		Charbonnages de France (CdF), including:		
Do.		Centre-Midi Bassin	Open pit mines (closed)	1,000
Do.		Lorraine Bassin	Underground mines (closed)	2,500
Cobalt, metal	metric tons	Société Métallurgique le Nickel (SLN)	Plant at Sandouville, near Le Havre	600
Copper, metal		Compagnie Générale d'Électrolyse du Palais	Electrolytic plant at Palais-sur-Vienne	45
Do.		Société Française d'Affinage du Cuivre	Smelter at Poissy, Yvelines	11
Diatomite		Ceca S.A.	Mines and plants at Riom-les-Montagne and St. Bazuille	100
Feldspar		Denain-Anzin Minéraux S.A. (Imerys Group)	Mine and plant at St. Chely d'Apcher	55
Ferroalloys		Comilog International	Plant at Boulogne-sur-Mer	500
Do.		Société du Ferromanganèse de Paris, Outreau	Plant at Boulogne-sur-Mer	420
Do.		Pechiney Electrometallurgie	Plants at Bellegarde, Laudun, and Marignac	400
Fluorspar		Société Générale de Recherches et d'Exploitation Minières (Alcan Inc.)	Mines in southern France	150
Gold	kilograms	Mines d'Or de Salsigne (Eltin Co., 51%; Ranger Co., 18%; Peter Hambro Plc., 10%)	Salsigne Mine near Carcassonne (closed)	3,000
Gypsum		S.A. de Matériel de Construction	Mine at Taverny	1,500
Iron and steel, steel		Sollac Atlantique S.A. (Acelor Group)	Dunkerque	6,700
Do.		do.	Fos-sur-Mer	4,200
Do.		do.	Florange	3,200
Do.		Sollac Unimetal (Usinor Group, 100%)	Gadrange, Neuves Maisons, and Thonville	8,400
Lead, metal		Metaleurop Nord (Metaleurop S.A.)	Plant at Noyelles Godault (closed)	165
Magnesium, metal		Pechiney Electrometallurgie	Plant at Marignac (closed)	15
Mica		Denain-Anzin Minéraux S.A. (Imerys Group)	Mine at Ploemeur, Brittany	160
Natural gas	million cubic meters	Société Nationale Elf Aquitaine (SNEA)	Gasfield and plant at Lacq	20,000
Nickel, metal		Société Métallurgie le Nickel (SLN)	Plant at Sandouville	16
Nitrogen, N content of ammonia		Grande Paroisse S.A.	Plant at Grandpuits	390
Petroleum:				
Crude	42-gallon barrels per day	Société National Elf Aquitaine (SNEA)	Paris Basin oilfields	1,000
Refined	do.	Total S.A.	Refineries at Gonfreville and La Mede	446,000
Do.	do.	Shell-Française	Refinery at Petite Couron	285,000
Do.	do.	do.	Refinery at Berre	270,000
Do.	do.	Société Nationale Elf Aquitaine (SNEA)	Refinery at Feyzin	120,000
Do.	do.	do.	Refinery at Donges	200,000
Do.	do.	do.	Refinery at Grandpuits	96,000
Do.	do.	Société Française British Petroleum (S.F.B.P.)	Refineries at Lavera	175,000
Do.	do.	Esso S.A.	Refineries at Fos-sur-Mer	237,000
Do.	do.	Mobil Oil Française	Refineries at Gravenchon	62,000
Do.	do.	Cie. Rhenane de Raffinage (CRR)	Refinery at Reichstett	80,000

TABLE 2--Continued
FRANCE: STRUCTURE OF THE MINERAL INDUSTRY IN 2005

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Potash, K ₂ O		Mines de Potasse d'Alsace S.A. (MDPA)	Amelie and Marie-Louise Mines in Alsace (closed)	2,500
Salt		Compagnie des Salins du Midi et des Salines de l'Est (Salins Group)	Mines and plants at Algues Mortes, Dax, Salin de Girad, and Varangeville	2,500
Sulfur		Société Nationale Elf Aquitaine (SNEA)	Byproduct from natural gas, Lacq plant	3,000
Talc		Talc de Luzenac S.A. (Rio Tinto Corp., 100%)	Trimouns Mine near Ariege, Pyrenees	350
Uranium, U ₃ O ₈	metric tons	Compagnie Général des Matières Nucléaires (Areva S.A.)	Mines at Limousin, Vendee, and Herault (closed)	1,800
Zinc, metal		Umicore Group	Plants at Auby-les-Douai and Calais	220
Do.		Metaleurop Nord (Metaleurop S.A.)	Plant at Noyelles Godault (closed)	110